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Actors' General Conceptions and Strategies for Local Development

An Application of Perspective Text Analysis

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Abstract

The purpose of this paper is to examine the interdependence between actors' conceptions and local strategies for development. Two peripheral municipalities with development problems are compared. The municipalities have a shared history and culture and a similar economic life. Yet they seem to have different development strategies. In order to understand why, the significant actors are focused upon. Their basic set of ideas and conceptions are examined as an important basis for their interpretations of the local community's situation and thus for their actions.

Depth interviews with two significant actors were analyzed with a method – Perspective Text Analysis – applicable to natural text. The method works inductively and is subject-governed which means that the text producer – and not the researcher or any a priori theory – is the point of reference. The result of the text analysis is a conceptual structure which describes and synthesizes the text producer's consciousness. The result is visualized in a topographical representation of the cognitive processes as they emerge from the interviews.

The two actors (A & B) were alike with respect to traditional characteristics of classification such as sex, age, education, professional background and party affiliation. Their general conceptions, however, could be ascribed to different traditions of ideas. The actors had disparate views of nature. There were differences in perspectives on time, in enacted problems, in perception of what is rational and reasonable as well as contradictions in society. Consequently they saw different solutions to the development problems. A was action oriented and expressed a conviction that the most urgent problem from his point of view – the local unemployment crisis – could be solved without radical changes. Adaptation to markets and structures and technical entrepreneurship were his solutions. B, as well, perceived the local unemployment problem but far more fundamental was the threatening ecological crisis. He therefore advocated an ecological approach to development and demanded more radical changes in values and structures. One conclusion of the study is that there is an established connection between the significant actors' general conceptions and the local strategies.

Research Problem

The internationalization and specialization of trade and industry has changed the situation for local business. Local business has become more and more integrated into the rest of the economy and is thus more dependent on global forces. In Sweden the regional disparities are increasing. There is a renewed growth of metropolitan areas while, at the same time, the situation for other areas is deteriorating. Structural unemployment and crises caused by shut-downs of dominating business activities have resulted in migration and negative population trends. There is also a growing interest in the potential of local initiatives and resources to produce viable and robust economic structures in the local communites. The creation of a more endogenous and diversified local and regional development has, during the last decade, more and more become a municipal responsibility. One interesting question in this context concerns *the action space, i.e the possibilities for local actors to act successfully in the structure and to develop strategies based on local conditions and visions of future.*

The starting-point for this paper is two sparsely populated peripheral municipalities (6000 and 8000 inhabitants respectively) in Northern Sweden. They are neighbouring municipalities with, largely, the same history, culture and economic development. They are located in an area with a culture that in vital aspects differs from that of the rest of the country. The two municipalities have the same structure of population and of the economy. Compared with the rest of the country they have a larger proportion employed in agriculture and in forestry, but a smaller proportion in manufacturing; mainly wood-based industry. The municipalities are characterized by high rates of unemployment, an undifferentiated labour market and, especially among the women, a low frequency of wage-earning work. Consequently the conditions resemble those of many other rural municipalities in peripheral areas.

In both municipalities an active local economic policy is pursued. The emergence of local strategies for the development of the economy should be seen in the light of the history, the local culture and the structure of these municipalities. Despite similarities in their situation and in some activities of local economic policy – e.g. the development of the small business sector – the two municipalities seem to have fundamentally different orientations for their development strategies.

Since the structure of the two municipalities on the whole seems to be the same we focus our interest on the dominating actors. Another reason for this is that the differences in the local economic policies appeared when they took up key executive positions in these municipalities. The actors are alike in many respects. They are men of the same age and have similar social and professional backgrounds. They are also members of the same political party and they occupy the leading political position in their municipalities. In our attempts to understand why the strategies are different we have therefore focused our interest on the actors and their interpretations of the local community's history and material and cultural conditions.

Individuals general conceptions provide them with patterns of interpretation and explanations to environmental change. Since the conceptions, at least in part, can be assumed to be reflected in their lines of action the actors' conceptions are essential for the understanding of their actions directed towards the future and thus for the understanding of local development strategies.

On the basis of these two municipalities the purpose of this paper is to study the following questions related to our main problem indicated above:
1. Are the actors' basic set of ideas and conceptions fundamentally different? Do they have different perspectives of time and views of the relation between man and nature? Do they have different views on technique and on the meaning of human work etc?
2. What fundamental traditions of ideas are underlying the actors' conceptions?
3. In what way are the dominating actors' conceptions reflected in the development strategies?

Method

To uncover actors' general conceptions the instrument of data collection must permit them to emerge. Since language has a central function as a cognitive instrument for conveying information to and from people the data collection must focus on language production. In addition to "cognitive mapping" it is also possible to use different kinds of more or less structured interviews.

The interview is a frequently used method of data collection in social sciences. One of the problems is how to summarize and analyse the interviews. Content analysis and phenomenological data synthesizing models are above all used for analyses of language production. In content analyses the text is compared to a theory or an a priori constructed classification system. The researcher tries to find elements in the text that can be used to point out similarities or differences between theory and text in order to modify or complete the theory. Different types of a priori assumptions will therefore determine which parts of the text that will be emphasized.

In phenomenologically oriented approaches, e.g. Glaser & Strauss (1967), the categorization is made in an ongoing interaction between the codes conceptualizing the empirical substance and those conceptualizing how these can be related as hypotheses in a theory. When additional data do not provide further information the process ends in a new or amplified theory, for example illustrated with data or with quotations from the text.

If we wish to highlight the interviewee's and not the researcher's conceptions we need an inductive method, where the reference point will be the individual's conceptualization and not the researcher's a priori assumptions. An interesting alternative is presented by Bierschenk & Bierschenk (1984-1988). On a theoretical basis in cognitive psychology and data linguistics they have developed a computer-based model for analysing and synthesizing naturally produced text – *Perspective Text Analysis.*

Perspective Text Analysis is an inductive method aiming at increasing the objectivity in data processing and to free the researcher from using an a priori constructed category system. This method is based on the assumption that people relate to their environment through language. Natural language is regarded as an instrument to express knowledge of and an attitude to – perspective to – the surrounding world. A text can therefore be regarded as the expression of a co-operative process between the observer (text producer) and the environment. The method implies that the interviewee's perspective emerges from the information embedded in the textual structure.

Our discussion is based on in-depth interviews with the dominating actors in the two municipalities. The purpose of the in-depth interviews was

to make the actors reflect on their own conceptions and to express their own comprehension and experience in words. The interviews were based on a set of questions on different themes. For each theme the interview technique permitted the actors to speak and to express their opinions quite freely. The actors have expressed their views on the situation of the municipalities and its causes, the desirable and the most probable development and on the ways to realize their visions of the future. The actors were also questioned about their views on technology/technique, patterns of consumption, unemployment and on the meaning of work.

By way of conclusion the interviewees could expound their views on the forest as a resource, its prospects and limitations, on forestry and on national forest policy. The aim of this part of the interview was to integrate the different issues discussed earlier in the interview. This was done on the basis of a concrete problem familiar to the actors, since the forest is an important resource in both municipalities. This work is based on only this part of the interview. During the interviews the actors seemed interested, concentrated and they also seemed to have reflected upon these issues.

Perspective Text Analysis is used in our study for the analysis of our interviews. The text – the verbatim written version of the interview – is gradually processed according to an algorithmic rule system. The coded text is statistically processed by means of a clustering algorithm and concepts are subsequently formulated on the basis of the generated textual strings. The result of the analysis is a conceptual structure describing and synthesizing the text producer's conceptions. The conceptual structure is used as the basis of the researcher's interpretation in the light of theories of and familiarity with the field of research. For a more detailed presentation of the method we refer to the appendix and to the works by the researchers who have developed the method.

In the following we will begin with a presentation of the two actors' conceptual structures and with a comparison of their basic conceptions. After that we try to answer the question if these conceptions are derived from different traditions of ideas. Finally we will discuss the relation between the actors' basic conceptions and the local development strategies in order to give a tentative answer to our main question concerning local freedom of action.

Results

Topographical representation of the actors' conceptions

The actors' conceptions, as they emerge from the interview text, are represented by a number of concepts and their relations and they are presented in a three-dimensional space. The concepts and the illustrated cognitive process constitute the basis of comparisons between the actors and with theories.

The method is based on a model that differentiates between the objective facts of a text and its perspective information. The result of the Perspective Text Analysis is a cubic space in which the actor's (text producer's) *viewpoints (objectives)* are projected on the background and on the bottom of the cube. The *perspective* – what the actor especially wants to emphasize – is projected on the foreground and on the top.

The objective is divided into four subcomponents with different meanings: figure, ground, means and setpoint. The figure denotes the point of

intention – the direction of the intention, i.e. what the discourse is about. The ground denotes the point of orientation to which different phenomena are related. The means denotes the instrument and the setpoint denotes the limit of an observation, i.e. goals and visions.

Actor A.

Figure component (Fig. 1). The transformational process starts with the state called supply restrictions. This concept summarizes that, on one hand, A talks about possibilities of livelihood but that he, on the other hand, emphasizes shortage of resources and other kinds of obstacles. The concept supply restrictions is modified by problems of resource renewal that give added emphasis to the restrictions. We have chosen to indicate the transformational effect of the second on the first concept by the synthezing term *exploitation restrictions*. Supplementation of resources is indicated as a *way out* and the presence of an exploitation potential and an economic niche is emphasized. These two concepts are summarized with the term *market potential*. The first phase is terminated when way out is transformed by market potential to a new concept – *market orientation* – indicating the directions of the actor's solutions.

The next phase starts when market orientation is transformed by political uncertainty. The political situation results in *action problems*. However, actor A raises objections to these problems and points out the necessity to act. *Action* and supply of external resources produce *development*. The next step of the process is the state *incompatibility of interests* when A points out the presence of competition for resources. The process now leaps into a new path where, partly, barriers to action and, partly, the occurrence of means of development are stressed. These concepts are summarized into *mobilization*. Conflicting interests are removed through *struggle*.

The next step of the process deals with the methods of this struggle for existence. Since A emphasizes rationality the method of the struggle must be *argumentation*. The concept strategy of large-scale production implies that A indicates the potential of large scale advantages even for a small community provided that there is local co-operation. Argumentation and large-scale production give further emphasis to A's belief in *rationality*. The possibility of rational action is however restricted by the demands for humanization. A rejects centre dependence and wants *autonomy*. On one hand autonomy is desirable but, on the other hand, it leads to fewer opportunities for rational action as a consequence of the local community's dependence on the environment. When *environment dependence* is modified by inflexibility this is, according to A, an expression of the fixating nature of the dependence.

The process now leaps into a new phase showing how to deal with the development problems. The local strategy shall be directed towards *action* and investments in *technique*. These are the means of loosening the present *fixation* and of creating *renewal*.

The possibilities are emphasized by technological potential, where technology is used in a broad sense. Renewal is transformed by technological potential into *entrepreneurship*, which is the last concept that summarizes the whole process. According to A entrepreneurship is of fundamental importance in solving the development problems.

The *Perspective on the Figure* (Fig. 1) focuses on central aspects for the actor. Based on the necessity to mobilize actors, A points out the importance of *action*. Since he believes in rationality as a guiding principle he re-

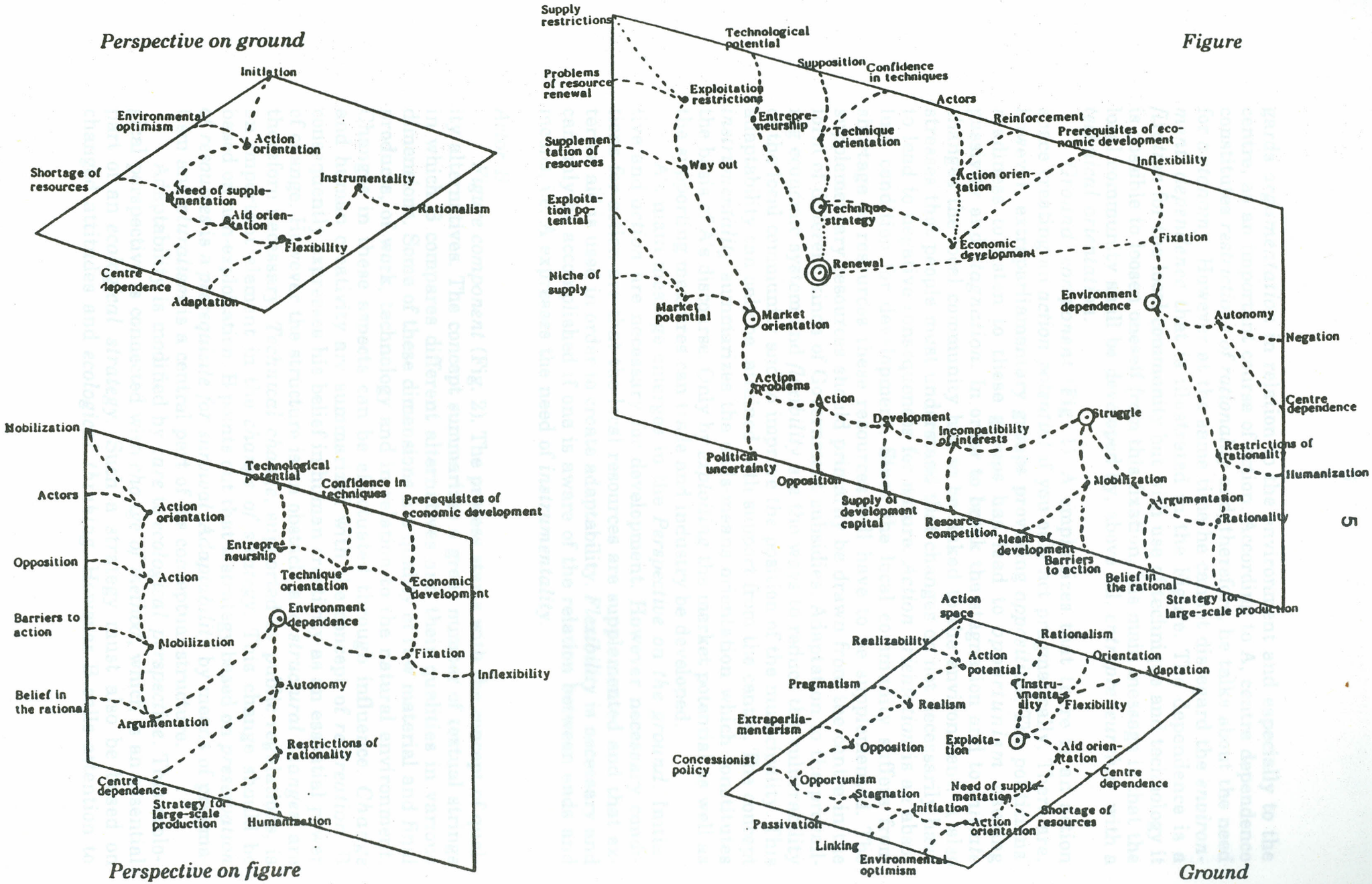


Figure 1. *Actor A: Operating structural relations characterizing perspective and viewpoints.*

gards *argumentation* in relation to the environment and especially to the centre, as an important course of action. According to A, centre dependence constitutes *restrictions of rationality* and, therefore, he talks about the need for *autonomy*. However at the same time he cannot disregard the *environment dependence* that is illustrated in the Figure. The dependence is a *fixation* for the local community but with use of technique and technology it is possible to loosen oneself from this fixation. His main message is that the local community shall be developed by, above all, *entrepreneurship* with a *technical orientation*.

Ground component (Fig. 1). A emphasizes that there is an action space creating an *action potential* if you only act pragmatically. There are, however, extraparliamentary groups provoking *opposition*. The politicians' readiness to listen to these groups has lead to *opportunism* causing passivity and *stagnation*. In order to break the stagnation and to *initiate* changes the local community has to be linked to the environment. A also stresses that people must understand that changes do not necessarily have to lead to negative consequences for nature. *Action orientation* is an absolute condition for development. Since the local community suffers from shortage of resources these resources will have to be supplemented. The supplementary resources should primarily be drawn from the centre in the form of different kinds of Government subsidies. Adaptation to the prevailing economic system and *flexibility* are the ways to reduce the vulnerability of the local community and to improve the position of the municipality. This adaptability can only be attained with support from the centre. The concept *instrumentality* summarizes the ends-means orientation which constitutes the basis of A's discourse. Only by *exploiting* the market potential as well as the supporting measures can trade and industry be developed.

A's main message emerges in the *Perspective on the ground*. Initiative and *action* are necessary for development. However necessary conditions for action are that the local resources are supplemented and that external aid is used in order to create adaptability. *Flexibility* is necessary and can only be accomplished if one is aware of the relation between ends and means, i.e. A expresses the need of *instrumentality*.

Actor B

Figure component (Fig. 2). The process starts with the concept of quality alternatives. The concept summarizes a great number of textual strings in which B compares different alternatives and their qualities in various dimensions. Some of these dimensions are quality of raw material and final products, of work, technology and in relation to the natural environment. Changes in these aspects can be effectuated through influence. *Change* and human creativity are summarized with the concept of *re-creation*. B consequently expresses his belief in human creativity as an essential power of change. However the structure is an obstacle and *structural changes* are therefore necessary. *Technical change*, supported by public regulations, is an important element in the *change of strategy*. This change should be based on non-exploitation. B points out that a strategy based on *preservation of resources* is a *prerequisite for survival*. *Adaptability* by means of pragmatism and *pluralism* is a central part of B's conceptual structure.

Adaptability is modified by *care* to *ecological perspective*. This ecological perspective is connected with *change of method*, which is an essential part of an *ecological strategy*. Such a strategy must also be based on changed attitudes and *ecological thinking*. However B calls attention to

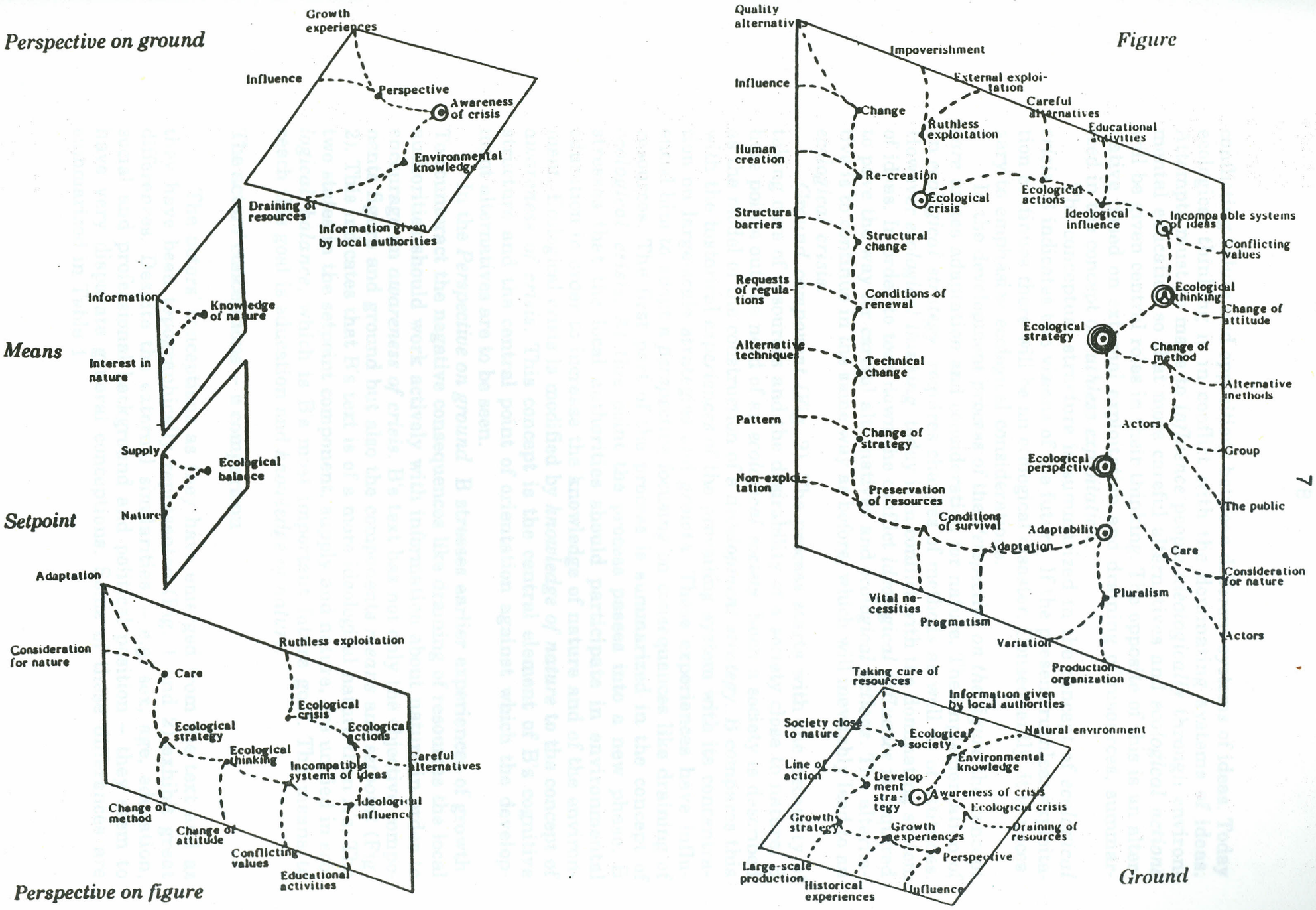


Figure 2. *Actor B: Operating structural relations characterizing perspective and viewpoints*

conflicting values and oppositions between different systems of ideas. Today ecological thinking is in conflict with the dominating systems of ideas. Attempts must be made to *influence* people *ideologically* through environmental education so that more careful alternatives and *ecological actions* will be given central roles in their thinking. The opposite of this is an alternative based on external exploitation and draining of resources, summarized in the concept of *ruthless exploitation*.

The conceptual structure is summarized in the concept of *ecological crisis*. B indicates two visions of the future. If the present ruthless exploitation continues there will be an ecological disaster. Consequently, it is necessary to emphasize ecological considerations.

In the development process of the *Perspective on the figure* the concept *care* unites adaptation and consideration for nature. The implementation of an *ecological strategy* requires changes of methods as well as of attitudes. However *ecological thinking* today is in conflict with the dominating system of ideas. In order to tone down the conflict *ideological influence* is required to pave the way for careful alternatives and *ecological actions*. The alternative is to continue in the same way as before, which will inevitably lead to an *ecological crisis*.

Ground component (Fig. 2). The process starts with the necessity of taking care of resources and the desirability of a society close to nature. B here points out the need of an *ecological society*. Such a society is described as the model of the construction of a *development strategy*. B compares this with the historical *experiences of* the prevailing system with its concentration on large-scale strategies and *growth*. These experiences have influenced him to adopt a *perspective* focusing on consequences like draining of resources. The first part of the process is summarized in the concept of *ecological crisis*. At this point the process passes into a new phase. B stresses that the local authorities should participate in environmental education in order to increase the knowledge of nature and of the environment. Ecological crisis is modified by *knowledge of nature* to the concept of *awareness of crisis*. This concept is the central element of B's cognitive structure and the central point of orientation against which the development alternatives are to be seen.

In the *Perspective on ground* B stresses earlier experiences of growth. To counteract the negative consequences like draining of resources the local authorities should work actively with information about nature in order to encourage an *awareness of crisis*. B's text has not only the objective components figure and ground but also the components *means* and *setpoint* (Fig. 2). This indicates that B's text is of a more ideological nature than A's. The two states in the setpoint component, supply and nature, are unified in *ecological balance*, which is B's most important future goal. The means to reach this goal is education and *knowledge of nature*.

The actors' conceptions – a comparison

The actors' conceptions as they have emerged from the text and as they have been topographically represented (Fig. 1 and 2) exhibit great differences. Despite the external similarities, – e.g. sex, age, education, social and professional background and political position – they seem to have very disparate general conceptions. Some of these differences are summarized in Table 1.

Table 1. *Summary of the actors' conceptions.*

Dimensions	Actor A	Actor B
Perspective of time	The present	From history to future
Enacted problems	Problems of action and stagnation	Ecological crisis
View of rationality	Instrumental rationality	Value rationality
Contradictions and conflicts	Interests	Values and systems of ideas
Solutions	Entrepreneurship	Ecological actions
	Adaptations to markets and economic structures	Re-creation and adaptation to man and nature
	New technique/technology and small-scale technique	Technology close to nature
	Education and training	Educational work

It is evident that the actors have different points of departure for their discourses. One important difference is the perspective of time. Actor A is above all talking about the present time and the near future, while B's perspective of time ranges from historical experiences of the growth society to goals in the distant future. The present is not so dominating for him as for actor A. The different perspectives of time can also be seen in the topographical representation where B, unlike A, has means as well as setpoint. This indicates, as we have already mentioned, that B's text is of more ideological and visionary nature. While A talks about the local community and its relations to the environment B emphasizes to a greater extent the big, universal problems of the future. The difference is also apparent in their interpretations of contradictions and conflicts. A emphasizes conflicting interests while B stresses contradictions of values and systems of ideas.

The different perspectives of time are also reflected in the images of the problems emerging from the texts. A stresses problems of action and the stagnation they have resulted in. He also draws attention to various restrictions, for example the activities of extraparliamentary groups and political opportunism. Values are allowed to govern instead of facts and experts who "know how it ought to be done". Other problems arise from resource competition. Actor B's main problem is the "ruthless exploitation society" and the threatening ecological crisis.

The actors also seem to have different opinions of what is to be regarded as reasonable and rational. Actor A's view of rationality seems to be directed towards the means and to disregard the goals – i.e. a kind of instrumental rationality. B's view of rationality is more value-oriented and B directs his energy towards the goals and what is desirable for the human being. This kind of rationality is closely related to what von Wright (1986, p. 140) calls value rationality – the knowledge of how to live a good life.

It is no wonder that the actors have different solutions to the problems considering their widely differing conceptions. A is more directed towards

actions expected to produce results in the near future. A's relations to the centre also seem to lack uniformity. On one hand there is a restriction in the rationality leading to claims for autonomy and, on the other, there is a restriction in the rationality caused by the autonomy. You cannot escape the environment dependence. Adaptation to markets and dominating structures is therefore essential for a successful strategy for economic development. Important elements of the strategy are market orientation, utilization of small-scale and new technology and exploitation of the opportunities for external (financial) aid. The present situation of the local community shall be changed by means of entrepreneurship.

Since actor B indicates another main problem he also focuses other solutions. The most important thing for him is an adaptation to man and nature – i.e. he emphasizes the need for ecologically responsible actions. Education and information are essential for the attainment of the goal – a society in ecological balance. The necessary re-creation of certain parts of the structure, technology and methods calls for awareness of the crisis and a willingness to act ecologically.

Figures of thought

By means of the topographically represented conceptual structure we have demonstrated that the actors, despite their similarities in formal aspects, in many respects seem to have totally different conceptions of their surrounding world. What is the explanation of this? We will try to answer the question on the basis of "a heuristic model for a critical examination of ideas" developed by Asplund (1979).

Asplund starts from the distinction made in Marxian theory between the economic base and the ideological-political superstructure. The economic base, considered to be the primary element, is defined as "the totality of relations of production corresponding to a certain stage of development of the forces of production". The ideological-political superstructure represents the religious, moral, political, cultural and other conceptions that people have in a given social structure. Institutions supporting these conceptions are also regarded as a part of the ideological-political superstructure (Bråkenhielm, 1981 p. 147). In Marxism there is a dialectic relationship between the economic base and the ideological-political superstructure which is realized in the actions of people.

Asplund's model is a composite model consisting of various levels. He makes a distinction between the *economic base*, the *discursive level* and the *level of figures of thought*. The two last-mentioned are associated with the ideological-political superstructure. The discursive level is the uppermost level while the level of figures of thought is an intermediary level between the economic base and the ideological-political superstructure. The figures of thought reflect the economic base and give rise to discourses. Asplund uses the concept discursive to characterize the relationship between a line of thought and its conditions on the next lower level. A figure of thought is a thought (concept) or a set of thoughts (concepts) but it is not in itself a developed line of thought. It is, however, developed or accomplished on the discursive level.

Before continuing we will give some examples of figures of thought and discuss the relations between the two levels. The concept childhood is one of the examples of figures of thought given in Asplund (1979) and he comments on it in the following way (our translation):

"If we try to 'think away' the concept childhood – try to imagine that we lack this concept – we immediately anticipate the vast consequences for working life, psychology, housing and buildings, recreation, sexuality, education, criminal law, other laws etc, etc The concept childhood is *a concept on which vital aspects of our society and our culture are founded*". (Asplund p. 150, our italics.)

Other examples of figures of thought indicated by the history of ideas are "the idea of progress" and "the great chain of being". We will come back to these below. There is a limited number of figures of thought during a certain epoch. The number of possible discourses, however, is almost unlimited. Many discourses can thus correspond to one figure of thought. The figures of thought are characterized by a certain degree of inertia – they function for a long time and they are regarded as generally applicable and complex. Asplund also discusses how the figures of thought influence the possibility for a certain thought or idea to be met with sympathy. The phenomenon "talk to deaf ears", can be explained by means of the concept figure of thought. The speaker's and the listener's ideas are simply not based on the same figure of thought.

Discourses are spoken or written. The interview texts used in our example should be regarded as two discourses. They deal with the forest and the strategies for local development and are, as we have already mentioned, in several aspects largely different. Have the two neighbouring municipalities chosen different "business ideas" in order not to compete with each other and do they, for that reason have chosen different niches of support? Or are there "deeper" explanations? After having performed and analysed the interviews and after having seen, that the dominating actors' discourses seem to be essentially different, we found that the latter alternative seems more reasonable.

Thus, Asplund's model can be used as an instrument. It is true that the two discourses *deal with* strategies for local development, but what exactly do they mean? This formulation of the question aims at uncovering the underlying figures of thought. The discourses are in that case also regarded as discourses *on* figures of thought. The determining factor in defining the "kinship" between different discourses – irrespective of how different they appear to be – is whether they refer to different figures of thought. Our question could thus be reworded as follows: *are the two discourses based on the same figures of thought?*

In his book "Framsteg eller förfall" ("Progress or decline", our translation) Frängsmyr (1980) analyses various historical predictions of the future expressed in the form of utopian schemes or visions of the future in the western tradition of ideas. His main interest is in conceptions and in views of future material conditions. He tries to find a basic pattern of the included ideas and complexities of ideas. His conclusion is that the fundamental principle is to be found in conceptions of how people shall relate to nature and its resources.

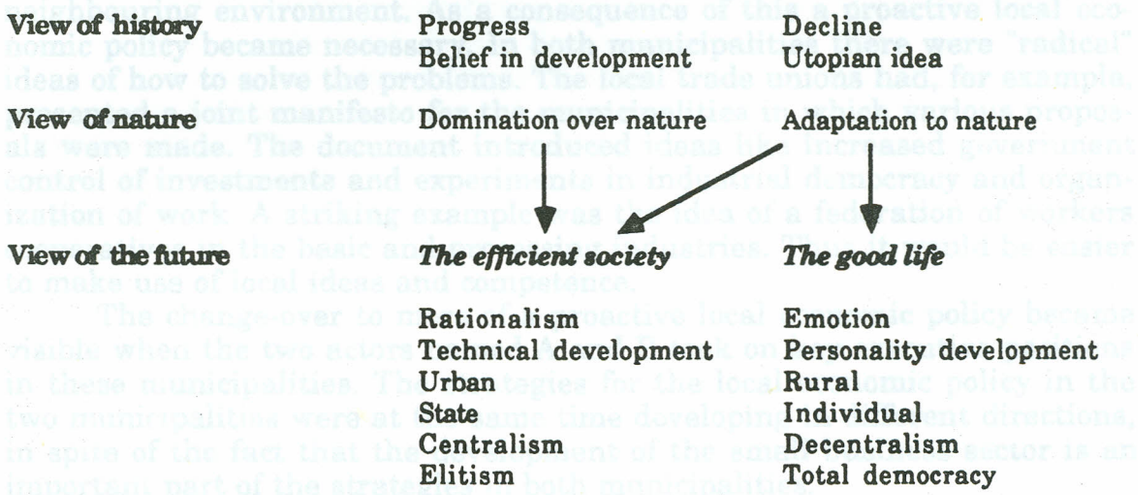
Historically there are two conflicting views on this. According to the first view man shall exploit the natural resources. Man shall be the master of and *dominate* nature. According to the other view man shall *adapt himself to* the processes of nature. By adapting himself to nature man will in the long run get more from nature than if he interferes with the processes of nature. In different periods these views have had religious as well as philosophical justifications. It is for example possible to find support for both views in the Bible. Frängsmyr (1980, p. 229) characterizes the differences between the spokesmen of these two standpoints in the following way:

"Those who made propaganda for adaptation seem to have been aware of the value and the limitation of the natural resources; they often show a kind of humility towards the mission of man. Those who on the contrary spoke for the conquest of nature consider nature more as a reserve of raw material and expressed themselves in terms of economy and efficiency." (Our translation.)

In addition to the view on nature Frängsmyr indicates another main line in the visions of the future that he calls view of history. He is of the opinion that a person who experiences contemporary society as a society in crisis or *decline* desires a more radical change. This helps to explain why the visions of the future are of a more *utopian* character. A person who on the contrary is satisfied with contemporary society is more inclined to *believe in development and progress* and to think that it is all right to continue as before.

Frängsmyr summarizes his analysis of the historical views on the future in two opposed types of society – *the efficient society* and *the good life.* Figure 3 below shows how he considers that these societies are related to the discussed views of history and nature. Only one of them – "the efficient society" – has actually been realized. Frängsmyr also concludes that the views of history and nature in the right-hand column just as often have given rise to views of the future based on ideas of "the efficient society" as of "the good life". He explains this by referring to the fact that even several utopians have been caught in the western ideal of rationality.

We will end this part of our paper with a discussion about the actors' conceptions. This discussion will be based on Asplund's model as well as on the discussion about the different visions of the future. The two actors seem, in their view of nature, to belong to different traditions of thought. A characteristic feature of B's discourse is the idea of adaptation to nature (see Table 1). The ecological crisis caused by man's ruthless exploitation of nature is considered as the most important problem. The solutions are for example sought in ecologically responsible actions, ideological influence and educational work on ecological issues in order to increase the awareness of crisis and, furthermore, an adaptation of techniques and methods to the claims of nature. This type of reasoning could be based on the figure of thought named *the idea of the great chain of being.* This fits in with B's



Figur 3. *Visions of the future in the western traditions of ideas. Frängsmyr (1980) p. 235 (our translation).*

long perspective of time. The past, the present and the future are connected. B's discourse is of more utopian character with elements of development pessimism (cf. decline in the above figure). If man continues to act in the same way as before it will end with an inevitable environmental catastrophe.

In A's discourse the forest/nature is above all a resource that can be profitably exploited. His reasoning is characterized by environmental optimism – nature will be all right. A expresses belief in the potential of technology and rationalism – a kind of development optimism. Nor does A's discourse have the same claims for re-creation as B's. A is of the opinion that the problems, at least in principle, can be solved within the framework provided by the present society. It is just a matter of adapting to the circumstances and of making the most of the situation. One of the figures of thought that could underlie A's discourse is the idea of progress.

The views of nature developed by the actors have some parallels with figure 3. It is evident that A's discourse, with his view of nature and history and with the outstanding position given to rationalism and technological development, is included in the left-hand column, "the efficient society". Actor B agrees with the view of history and nature presented in the right-hand column. His conceptions oriented towards value rationality and towards belief in human creativity is a reminder of the type of society called "the good life".

Strategies for Local Development

So far, our discussion has emphasized two individuals – both dominating actors in their municipalities – with very disparate conceptions. These conceptions can be ascribed to different traditions of ideas. What kind of economic policy is actually being pursued in the two municipalities? We will discuss the question in this part of the paper.

In the late seventies the situation in the two municipalities was very much the same. The dominating problem was the employment situation resulting in migration from the local areas. People started to realize that the government's regional policy could not solve the problems. At the same time there were shutdowns of industries in these municipalities and in their neighbouring environment. As a consequence of this a proactive local economic policy became necessary. In both municipalities there were "radical" ideas of how to solve the problems. The local trade unions had, for example, presented a joint manifesto for the municipalities in which various proposals were made. The document introduced ideas like increased government control of investments and experiments in industrial democracy and organization of work. A striking example was the idea of a federation of workers cooperatives in the basic and processing industries. Thus it would be easier to make use of local ideas and competence.

The change-over to more of a proactive local economic policy became visible when the two actors named A and B took on key executive positions in these municipalities. The strategies for the local economic policy in the two municipalities were at the same time developing in different directions, in spite of the fact that the development of the small business sector is an important part of the strategies in both municipalities.

According to Melin, Alsén, Berger, & Nilsson (1984, p. 154) a strategy for economic policy is "the set of goals, policies, values and visions providing the answers to the following questions: (1) What type of employment and

economic structure are the future goals of a municipality? (2) What is the role of the municipality in the economic development and how shall local actors be engaged in this process?" (our translation). The answers to these questions determine the direction of the strategies for local economic development.

The strategies are arranged according to different classes. By strategy 1 the municipalities are given rather limited functions in the economic policy. Economic policy is primarily regarded as government affair. The local economic policy is oriented towards facilitating the adaptation to changes in the industrial field through above all the development of the necessary infrastructure.

Strategy 2 is also based on the assumption that specialization in the industrial field and the resulting external control must be accepted. At the same time it is necessary to try to put a stop to the resulting local vulnerability. The local economic policy is therefore directed towards actions aiming at strengthening the competitive position of the local business sector. The development of networks among local firms, joint marketing and lobbying in order to achieve greater government responsibility for the financing of local projects are measures within the scope of this strategy.

Strategy 3 involves to a greater extent an orientation towards self-reliance. The task of the municipality is to counterbalance and reduce the influence of external forces. Local identity, local mobilization and local resources are the key words of this strategy. The tasks of the municipality are to initiate, co-ordinate, encourage and support local projects and self-reliance.

In the following we will give a brief outline of the strategies of the two municipalities. In order to demonstrate the nature of the strategies the description is somewhat polarized since it emphasizes differences between the municipalities. There are, of course, also many common features in their local economic policies.

Municipality A. The strategy for economic policy of municipality A resembles strategy 2. The future orientation of the strategy is based on the existent economic tradition but it also suggests efforts to differentiate the economy into new activities such as computers and electronics. A great number of activities have been oriented towards strengthening the competitive positions of local business firms in order to facilitate their adaptation to changes in the industrial fields. Some examples of these activities are education aiming at raising the level of local competence, furthering the arrangement of contacts and marketing support, facilitating raw material supplies and supporting co-operation between the firms. An important element of this strategy is the encouragement of entrepreneurship. Examples of concrete actions in this municipality are the financing of a catalogue in which the products and the know-how of the firms are presented, the efforts to encourage people who have left the municipality to return bringing know-how and new ideas and the organisation of a development centre aiming at raising the competence of local firms. An information campaign for the purpose of raising the felling volume in private forestry in order to secure the local supply of raw material is another example. The municipality has co-operated actively with various governmental projects and experiments in order to raise funds for their ventures.

Municipality B. The strategy of municipality B on the other hand, seems to be closer to strategy 3. This strategy is, according to Melin et al. (1984), based on the most important aspects of the idea of self-reliance: (1)

An independent opinion of what is good for the local community. (2) Self-sufficiency regarding basic requirements. (3) Boldness in the efforts to reduce the vulnerability even if they are in conflict with the dominating structures of power. The efforts are oriented towards a widely spread local mobilization in which all the inhabitants of the municipality must be engaged. The local authorities also try to develop the smaller villages through the local culture, the spirit of the village, the spirit of solidarity and the willingness to co-operate. Small-scale projects oriented towards cooperatives and other forms of collective actions seem to be elements in a long-term development strategy. The ecological aspirations of the municipality have above all attracted attention. Efforts have been made to encourage the farmers to use less chemicals in agriculture and forestry and to use ecologically adjusted methods. Experimental activities in order to test the methods are carried out etc. The task of the municipality has been to initiate and to coordinate the mobilization through for example participation in the raising of the necessary economic funds and in the organisation of the experiments. The municipality has also created a position as municipal ecologist. Other elements in this strategy are "Start-your-own-business" campaigns and courses aiming at developing creativity, ideas, self-reliance and co-operation. The municipality has also worked actively for pedagogical experiments with student participation in educational planning and for camp schools for children where they learn local history and acquire knowledge of their roots. Contacts with researchers have also been an important element and a university course in environmental protection has been given in the municipality. It should also be pointed out that, to a certain extent, municipality B uses the same methods as municipality A.

The Actors' Conceptions and the Strategies for Local Development

The discussion above shows that, in spite of the historical, cultural and structural similarities, the two municipalities have different orientations in their local economic policies. Municipality A has a policy oriented towards the strengthening of the ability of local business to compete and facilitate the adaptation to the industrial fields. Municipality B, on the other hand, aims at a widely spread local mobilization in which the important elements are ecological orientation and experiments with new working methods.

One of our initial questions was how the differences could be explained. One possible explanation is that the two municipalities, in order not to compete with each other, have tried to find different niches of support. If that is the case the different strategies for local development can simply be regarded as two examples of business ideas. Another possible explanation is that the differences can be traced back to the dominating actors in the municipalities.

Since the actors are alike with respect to traditional characteristics of classification such as sex, age, education, professional background and party affiliation we look for "deeper" explanations in the report. Two persons with very different conceptions have emerged. Their perspective of time and their ways of describing the situation and defining the problems are different. Consequently they also have different opinions of the means – i.e. the solutions to the problems and the role of the municipality. They also give different answers to the why-question, i.e. the goals.

Their visions of the future can be interpreted as discourses on diffe-

rent figures of thought, i.e. their conceptions of the world seem to refer to different parts of the western tradition of ideas. Actor A has a strong belief in development and progress – we can go on just as before – in combination with a view of nature with man dominating over nature. Actor B's opinion is that contemporary society is suffering a crisis and that radical changes are required. He also has a view of nature emphasizing the adaptation to nature.

In their concrete form the local development strategies correspond to a great extent with the basic conceptions of each actor. One fundamental question is if the texts produced by the actors should only be regarded as speeches for the defence of the local strategies. However it should be observed that in our analyses of the texts we have chosen a part of the interview that only indirectly deals with local development policy. Instead the interview focuses on an important question in the municipalities – the forest and its utilization. It is also apparent that the basic conceptions are so different that we can reject the assumption of different business ideas.

Actors' conceptions provide them with patterns of interpretations. Some of the ideas manifested in the strategies of the municipalities could be found in both municipalities when the dominating actors took up their positions. Other actors, local as well as external ones, have of course also influenced the process in different ways. However only the ideas fitting in with the dominating actor's pattern of interpretation have been accepted and resulted in action (cf. the metaphor "to talk to deaf ears"). The concrete strategies can at the same time lead to the situation that the actors can be assumed to reinforce and to try to confirm their conceptions. Ideas accepted by B do not fit in with A's interpretation of the problems. Consequently, it is difficult to imagine A as the dominating actor in a municipality with the same local strategy of development as in municipality B.

If the ideas are to be concretized in a strategy – an integrated line of action – the actors must get acceptance and support from the environment. That the actors got acceptance for their very different ideas is shown by the correspondence between the conceptions and the development strategy of each municipality. This may seem surprising considering the structural similarities of the municipalities. A possible explanation is that the actors emphasize and adapt themselves to different parts of the structure. A emphasizes the economic structure while B, above all, takes the local and cultural structures into consideration, i.e. the two actors are trying to get support from different parts of the environment. Actor A could probably also get support for his ideas in municipality B and vice versa.

Our discussion indicates that we ought to be able to draw the conclusion that there is local action space, i.e. there are possibilities for local actors to work out and concretize local strategies for development from their own conceptions and visions of the future. The final answer to our question about the local action space depends on whether the local development strategies will be successful in the long run.

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Authors' Notes

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Appendix

Perspective Text Analysis

The theoretical basis of the method used for text processing – Perspective Text Analysis – is only briefly described in this report. For further discussions and details we refer to the reports published by the researchers who have developed this method (Bierschenk & Bierschenk 1984-1988). One of the basic ideas of this method is that people relate to their material and socio-cultural environment through language. Knowledge and comprehension emerge from the individual's co-operation with the environment. "Human comprehension is conceived as a synthetic processing of pictorially or symbolically mediated information" (Bierschenk & Bierschenk 1984 pp. 1-2). Natural language is the instrument of expressing knowledge as well as a perspective to the surrounding world. In this meaning language is ecological. Natural language is supposed to be efficient, precise and complete. People are also assumed to have the ability of using language in an adequate way.

Another starting-point is that the individual is intentionally and responsibly acting towards the environment (compare the discussion of the difference between this and traditional approaches in Bierschenk & Bierschenk 1986 a). People express their observations in the form of verbal statements. Language is examined as an intentional act and is conceived as a key to the understanding of consciousness and knowledge. A text can therefore be regarded as the expression of a co-operative process between an observer (the text producer) and an environment. The basic components in this process are Agent (A), Action (a) and Objective (O). These components represent the functional, structural and dynamic aspects of an observation (Bierschenk & Bierschenk 1985). The relationship between the components may be formally expressed in the schema model:

$$A \longrightarrow a \longrightarrow O$$

The schema is based on the Agent as the controller of a discourse perspective. AaO establishes strict dependencies between Agent, Action and Objective. The schema model is based on the following assumptions (Bierschenk & Bierschenk 1987 p. 3):

" 1. The perspective of the agent (A) governs the choice of viewpoints (O), which means that the perspective is latent in the verbal flow.
2. The viewpoints are selected to describe objects and events within a specified context.
3. The information embedded in the structure represented becomes accessible only in relation to activated components. The kind of observation manifested in a verbal expression depends on what is being realized through the action component (a). "

A text consists of series of AaO-relations from which the inherent structure of the text may be extracted. The agent has a controlling as well as an integrating function. The integrating function is represented in the following formalization:

(Aa(AaO, AaO .....))

By using an algorithm based on a rule system will it be possible to identify the agent function (perspective) controlling the production of language. It is also possible to differentiate the objective and the perspective. The method processes running text so that the perspective of the interviewee (the text producer) is extracted from the information in the text. This shows how the textual agents (who might be others than the text producer), i e the actor in the text, relates to the objectives on which the textual agents expresses their views. This is also controlled by the text producer. In the following we will develop our discussion and give a brief outline of the different steps in the Perspective Text Analysis.

The Procedural Processing

An algoritmic analysis of the interview text is carried out. Figure 4 shows the order between the operations of the analysis. Not until the result of the text analysis – a conceptual structure – is topographically represented in a cubic space will the interpretation and categorization begin.

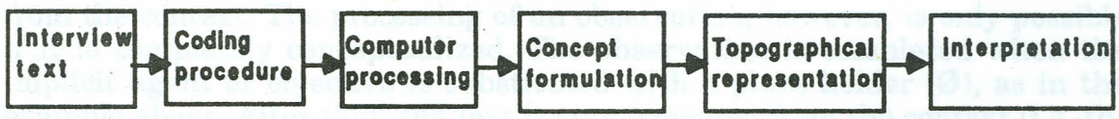

Figure 4. *The procedural processing*

The material of the analysis is the verbatim written interview. In the first step of the text processing – *the coding procedure* – all the AaO-units are identified and analysed according to the following model:

.	Agent	Action (verb)	Figure	Ground	Means	Setpoint	.
00	30	40	50	60	70	80	90

Every textual element is given a unique code according to defined rules. The 00 code indicates a sentence opener and the 90 code the end of the text. The main components are given the following codes: Agent (30), Action (40) and Objective (50, 60, 70, 80). Prepositions are used to differentiate the objectives. Objectives with spatial prepositions (e.g. on, from, in) are given the code 60 (Ground), objectives with instrumental prepositions (e.g. with) are given the code 70 (Means) and objectives with intentional prepositions (e.g. for) are coded 80 (Setpoint). Objectives without prepositions are given the code 50 (Figure). The different figure notations of the objectives are also an expression of the distance to the agent. The higher the figure notation the greater the distance between the agent and the objective to which the statement refers.

In the following we will give an example of the coding of one of the sentences in our interview. The sentence runs as follows: "*Anyone who bids the most for the forest gets it.*"

Text	Identification	Process	Block	Supplementation
.	00			
(to)	01 00		A 35	
Anyone	01	30		
who	01	30		
ØaO		30		anyone who
bids	40a			
the most		50		
for	80			
the forest		80		
(to)	01		A 36	
ØaO		30		anyone who
gets	40a			
it		50		

The conceptual schema is complete when every observation expresses an AaO relation. In natural language it is not always necessary for the empirical agent to manifest these components since the meaning is understood from the context. The processing of an observation, however, is only possible if it is completely conceptualized. The observation is completed when the implicit agent or objective is substituted with a place holder (Ø), as in the example above. After that, the text is supplemented from the context (i.e. the rest of the text) according to specific rules. When the whole text is coded it is divided into structural units – blocks (A1, A2 etc). Each block contains an AaO relation. The blocks and the unique textual strings included in these constitute the input for the next step – the computer processing.

The computer processing is performed with a personal computer (PC) and a VAX-computer including the following main functions (Helmersson 1987):

- Edition of structural unities – blocks.
- Matrix generation to determine relational affinity between the Agent and the Objective components (PC).
- Cluster analysis executed with Wishart's CLUSTAN program (VAX).
- Crystallization of significant groupings by means of a t-test (PC).
- Printing of clustered textual strings (PC).

Block A35 in the above example consists of the following strings:

30 anyone who
40 bids
50 the most
80 for the forest

After the input of strings eight matrices are generated (50/30, 30/50, 60/30, 30/60, 70/30, 30/70, 80/30 and 30/80). The first matrix, the figure of the text, consists of all unique 50-strings (Objectives) as row entries and the 30-strings (Agents) as the entries of the columns. The sentence in the example above forms the following matrix:

50-strings	30-strings anyone who
the most	1
it	1

Relational affinity between the Agent (30-strings) and the Objective (50-strings) is marked with 1. Independence is marked with 0. Strings in which the objectives share the same agent/agents are similar. If the rows and the columns of the 50/30 matrix are converted it results in a 30/50 matrix. This matrix presents the perspective on the textual Figure. The matrix shows how every agent is linked to one or more objectives through which the empirical agent presents the perspective on what he or she is talking about.

30-strings	50-strings the most	it
anyone who	1	1

The computed matrices are processed with a cluster analysis. The chosen clustering algorithm is Ward's method (Bierschenk & Bierschenk 1986 c). The cluster analysis means grouping of similar strings to discover cooperative structures in the text. By an iterative grouping process the clustering which results in minimum loss of information is searched for. The result of the analysis is represented in the form of a hierarchical clustering tree. The tree shows in what way and on what level in the hierarchy the clustering took place. On the 0.0-level the items are most similar to each other. The level of significance (t-test) for the number of clusters is also described (Fig. 5).

80/30 analysis

Beteckning	Innebörd	Värde
C	COEFF från klustercykel	
a	Medelvärde för COEFF	0.217
s	Standardavv. för COEFF	0.100

Cykel Nr	Koeffi-cient C	Avvikelse A=(C-a)/s	t-test t-värde T=A#Sqrt(n)	DF n-1	Sign. P(t>T)	Antal kluster n
9	0.400	1.820	2.574	1	0.118	2
8	0.222	0.049	0.084	2	0.470	3
7	0.222	0.049	0.097	3	0.464	4
6	0.222	0.049	0.109	4	0.459	5
5	0.222	0.049	0.119	5	0.455	6
4	0.222	0.049	0.129	6	0.451	7
3	0.222	0.049	0.138	7	0.447	8
2	0.222	0.049	0.146	8	0.444	9
1	0.000	-2.161	-6.834	9	1.000	10

ITEMS GROUPED CYCLE	I	J	COEFF
1	5	7	0.000
2	1	2	0.222
3	1	3	0.222
4	4	6	0.222
5	4	8	0.222
6	9	10	0.222
7	1	9	0.222
8	1	4	0.222
9	1	5	0.400

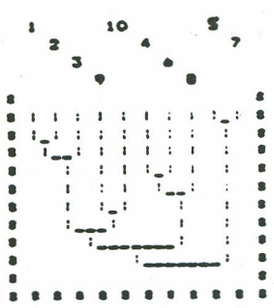

Figure 5. *Hierarchical clustering and t-test for the number of clusters*

Two criteria can be used in order to determine the number of clusters for the continued processing. Either a certain level of significance or a natural shred in the progress of the level of significance. When the number of clusters is determined the textual strings of each cluster are printed.

We will illustrate the next step of the analysis – *the concept formulation* – with an example. Cluster 12 in the 50/30 material for actor A contains the following strings (literally translated from Swedish):

Cluster 12, 50/30-analysis

Number	Contents
38	this nonsense
39	this rubbish you
40	you + it not a straightforward question but a veiled question
41	it not a straightforward question
126	almost
127	a new desert

The contents of these strings is to be given a name in order to abstract the prototypical information of the group. The person who expresses himself in the example states his opinion that arguments not based on facts are devastating. We think that this cluster could be called *belief in the rational.* The designation belief in the rational is represented as a terminal state of the process at the edge of the plane (A's Figure component in Fig. 1). Belief in the rational is one of the analytical concepts in the Figure. Every state at the edges of the planes of the cubic space represents a cluster. The links between different groupings according to the hierarchical clustering tree gives a node farther into the cube. The inner nodes represent the synthetical concepts. The circle around the node representing *struggle* indicates that this concept lies deeper in the mental structure than concepts represented by nodes without a circle. The two states belief in the rational and struggle form a synthetical concept – *argumentation*. Argumentation is then transformed by *strategy for large-scale production,* abstracted from cluster 13, into *rationality*. Rationality is transformed by humanization into *restrictions of rationality* etc.